

## Title (en)

METHOD OF MANUFACTURING COMPONENT MEMBER IN VGS TYPE TURBO CHARGER, COMPONENT MEMBER MANUFACTURED BY THE METHOD, EXHAUST GUIDE ASSEMBLY OF VGS TYPE TURBO CHARGER USING THE COMPONENT MEMBER, AND VGS TYPE TURBO CHARGER INCORPORATING THE EXHAUST GUIDE ASSEMBLY

## Title (de)

VERFAHREN ZUR HERSTELLUNG EINER KOMPONENTE IN EINEM TURBOLADER MIT VARIABLER GEOMETRIE; DURCH DAS VERFAHREN HERGESTELLTE KOMPONENTE; ABGASFÜHRUNGSANORDNUNG FÜR EINEN DIE KOMPONENTE VERWENDENDEN TURBOLADER MIT VARIABLER GEOMETRIE UND DIE ABGASFÜHRUNGSANORDNUNG ENTHALTENDER TURBOLADER MIT VARIABLER GEOMETRIE

## Title (fr)

PROCEDE DE FABRICATION D'ELEMENT CONSTITUTIF DE TURBOCOMPRESSEUR DU TYPE VGS, ELEMENT CONSTITUTIF FABRIQUE SELON LEDIT PROCEDE, ENSEMBLE DE GUIDAGE DE GAZ D'ECHAPPEMENT DE TURBOCOMPRESSEUR DANS LEQUEL LEDIT ELEMENT CONSTITUTIF EST UTILISE, ET TURBOCOMPRESSEUR DU TYPE VGS EQUIPE DUDIT ENSEMBLE DE GUI

## Publication

**EP 1422384 A4 20070613 (EN)**

## Application

**EP 02755807 A 20020802**

## Priority

- JP 0207943 W 20020802
- JP 2001235745 A 20010803
- JP 2001235766 A 20010803
- JP 2001235780 A 20010803
- JP 2001235788 A 20010803

## Abstract (en)

[origin: EP1422384A1] A novel method of manufacturing a component member of a VGS turbocharger is provided, which method enables, when manufacture of the component member is performed mainly by press working using a die, the press working to be efficiently performed because of various engineering improvements applied thereto in accordance with working techniques and a formed shape. The invention is characterized in that: to form receiving holes (25) for rotatably holding adjustable blades in a turbine frame as an example of the component member, preparatory holes (25a) having a diameter equal to or smaller than that of the receiving holes (25) in a finished state are formed and then the receiving holes (25) are finished by pressing a steel ball (B) having a diameter approximately equal to that of the receiving holes (25) in the finished state into each of the preparatory holes (25a) to provide a desired accuracy in hole diameter and a desired surface roughness of inner surfaces thereof; and the steel ball (B) is integrally formed on an distal end of a punch portion (PU). <IMAGE>

## IPC 1-7

**F01D 17/16**

## IPC 8 full level

**B21J 15/02** (2006.01); **B21J 15/12** (2006.01); **B21K 3/04** (2006.01); **B21K 25/00** (2006.01); **B23P 9/00** (2006.01); **B23P 15/00** (2006.01); **B24B 15/00** (2006.01); **F01D 17/16** (2006.01); **F02B 37/24** (2006.01); **F02C 6/12** (2006.01)

## CPC (source: EP KR US)

**B21J 5/08** (2013.01 - KR); **B21J 15/02** (2013.01 - EP US); **B21J 15/12** (2013.01 - EP US); **B21K 1/46** (2013.01 - KR); **B21K 3/04** (2013.01 - EP US); **B21K 25/00** (2013.01 - EP US); **B23P 9/00** (2013.01 - EP US); **B23P 15/00** (2013.01 - EP US); **B24B 15/00** (2013.01 - EP US); **F01D 17/16** (2013.01 - KR); **F01D 17/165** (2013.01 - EP US); **F02B 37/24** (2013.01 - EP US); **F02C 6/12** (2013.01 - EP US); **B21D 39/00** (2013.01 - EP); **F05D 2220/40** (2013.01 - EP US); **F05D 2230/00** (2013.01 - EP US); **F05D 2230/23** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US); **Y10T 29/49323** (2015.01 - EP US)

## Citation (search report)

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## Designated contracting state (EPC)

DE FR GB IT

## DOCDB simple family (publication)

**EP 1422384 A1 20040526**; **EP 1422384 A4 20070613**; **EP 1422384 B1 20090708**; CN 1561430 A 20050105; DE 60232889 D1 20090820; KR 101197064 B1 20121106; KR 20040035704 A 20040429; US 2004231327 A1 20041125; WO 03014531 A1 20030220

## DOCDB simple family (application)

**EP 02755807 A 20020802**; CN 02819330 A 20020802; DE 60232889 T 20020802; JP 0207943 W 20020802; KR 20047001479 A 20020802; US 48565104 A 20040706